एक कदम स्वच्छता की ओर

पानीपत, हरियाणा - 132140
Indian Oil Corporation Limited
Panipat Refinery & Petrochemical Complex
Panipat, Haryana - 132140
वेबसाइट : www.iocl.com; ई–मेल : panipatrefinery@indianoil.in
दूरभाष : 0180-2524001; फैक्स : 0180-2578833

रिफाइनरीज़ प्रभाग
Refineries Division

Ref. No. PR/HS&E/4

Date: 05.07.2017

To :

The Additional Director (S)
Ministry of Environment & Forests,
Govt. of India,
Regional Office (N.R.)
Bays No. 24-25,
Sector-31-A, Dakshin Marg,
Chandigarh – 160047

Ref. No. J-11011/7/2004-IA.II(I) dated 09.08.2004

Sub: Compliance report of environmental conditions – expansion of Panipat Refinery (from 12 MMTPA to 15 MMTPA) and setting up of Indalin^{+} unit at Panipat Refinery Complex

Dear Sir,

Enclosed please find herewith the half-yearly compliance report of Panipat Refinery for the period Jan'17 - Jun'17 of the MoE&F stipulations w.r.t. Ref. no. J-11011/7/2004-IA.II(I) dated 09.08.2004.

Thanking you.

Received @Chandigarh 06.07.17

Yours faithfully,

Encl: As Above.

(M. K. Das)
Chief Manager
(Health, Safety & Environment)

Northern Regional Office
Ministry of Environment & Forests
Bays No. 24-25, Dakshin Marg
Sector 31-A, Chandigarh

CC: RO, Haryana State Pollution Control Board, Panipat

COMPLIANCE TO ENVIRONMENTAL CLEARANCE STIPULATIONS FROM MOEF FOR EXPANSION OF PANIPAT REFINERY (FROM 12 MMTPA TO 15 MMTPA) AND SETTING UP OF INDALIN+ UNIT AT PANIPAT REFINERY COMPLEX OF IOCL, PANIPAT REFINERY HARYANA

Your Ref No. J-11011/7/2004-IA.II(I) dated 09.08.2004

Specific conditions:

Sl. No.	EC Conditions	Compliance Status
1.	The company shall ensure strict implementation / compliance to the stipulations made by MOEF vide OM no. J-11001/60/2000-IA-II dated 9th April, 2001 for expansion of Panipat Refinery from 6 MMTPA to 12 MMTPA	Ensured.
2.	The gaseous emissions (SO2, NOx and HC, Benzene) from the various process units should conform to the standards prescribed under Environment (Protection) Rules, 1986 or norms stipulated by the SPCB whichever is more stringent. At no time, the emission level should go beyond the stipulated standards. In the event of failure pollution control system(s) adopted by the unit, the respective unit should not be restarted until the control measures are rectified to achieve the desired efficiency.	Complied. Gaseous emission from vario process units meets the prescribed standards.
3.	Adequate ambient air quality monitoring stations, (SPM, SO2,NOx and HC, Benzene) should be set up in the refinery complex in consultation with SPCB, based on occurrence of maximum ground level concentration and down-wind direction of wind. The monitoring network must be decided based on modeling exercise to represent short term GLCs Continuous on-line stack monitoring equipment should be installed for measurement of SO2 and NOx. Data on VOC should be monitored and submitted to the SPCB / Ministry.	A total of 8 nos. CAAQMS (2 nos. in Panipat city, no. in Refinery township, 3 nos. in Refinery & nos. in Panipat Naphtha Cracker and polishi pond area) are in operation. These were set up consultation with HSPCB. Also mobile van f ambient air quality monitoring is in place. For all stacks: SO2, NOx analyzers are availab and linked with CPCB server. Fugitive emission monitoring for hydrocarb and benzene is done regularly through approv MoEF/HSPCB approved agency regularly quarterly basis. All reports are submitted to HSPCB regularly.
4.	Fugitive emission of HC from product storage tank yard, crude oil tanks etc. must be regularly monitored. Sensors for detecting HC leakage should also be provided at strategic locations.	Fugitive emission monitoring for hydrocarb and benzene for product storage tanks and cru oil storage tanks is done through MoEF/HSP approved agency regularly on quarterly basis.

Specific conditions:

Sl. No.	EC Conditions	Compliance Status
		Hydrocarbon detectors have been provided at strategic locations.
5.	The company shall also ensure that the total SO2 emissions from the Panipat Refinery after expansion shall not exceed i.e. 1000 kg/hr. The company shall install an additional Sulphur Recovery Unit (225 MT/day capacity) with 99.9% efficiency and the entire gas generated should be amine treated to reduce the SO2 emissions level from the Refinery.	The total SO2 emission of Panipat Refinery remains in the range of 900-1000 kg/hr. 5th SRU having a capacity of 225 MT/day with design efficiency of 99.9% was installed commissioned and is in operation. With this Panipat Refinery has 5 nos. Sulphur Recovery Units (SRU) as detailed below : • 2 nos. SRUs: 99 % efficiency, 2x115 MT/day capacity. • 3 nos. SRUs: 99.9 % efficiency, 3x225 MT/day capacity.
6.	As per the commitment given, there should be zero effluent discharge due to the proposed expansion. The company should ensure that there will be no discharge of treated effluent into Thirana Drain and the treated effluent from the refinery is not discharged along with the treated effluent from PX-PTA plant. The entire treated waste water should be recycled for reuse in the plant operation and greenbelt development so as to maintain zero discharge. Further, the liquid effluent generated from the Refinery should be treated comprehensively to conform to the load based standards and concentration limits prescribed under Environment (Protection) Act, 1986 Rules.	ETP-1 & ETP-2 treated effluent meets MINAS. These treated effluent are completely re-used as a feed to RO plant and as a makeup to Cooling Towers. A part of PTA-ETP treated effluent re-used as a makeup to Cooling Towers. The balance is used for irrigation in our Greenbelts. The treated effluent quality of all above three ETPs meets the load based Standards and Concentration Limits.
7.	The IOCL shall ensure installation of continuous flow measurement devices so that only the permitted quantity of treated effluent from PX-PTA plant (255 m3/hr) is discharged. Further, IOCL shall make all efforts to recycle and reuse the treated effluent from PX-PTA plant after commencing of the unit.	Flow meters were installed at the time of setting up PTA-ETP. A part of PTA-ETP treated effluent re-used as a makeup to Cooling Towers. The balance is used for irrigation in our Greenbelts.
8.	Additional water requirement shall not exceed 400 m3/hr. The total quantity of effluent generation should not exceed 1280 m3/hr as indicated in the Environment Management Plan. The treated effluent should be reused/ recycled to achieve zero discharge.	The total allowable withdrawal of fresh water as per previous EC was 3000 m3/hr. Adding the additional quantity of 400 m3/hr, the overall total allowable water quantity is 3400 m3/hr. Presently, fresh water consumption of the Refinery is 1800-1950 m3/hr A total quantity of effluent generation remains <1100 m3/hr. ETP-1 & ETP-2 treated effluent meets MINAS.

Specific conditions:

Sl. No.	EC Conditions	Compliance Status
		These treated effluents are completely re-used as a feed to RO plant and as a makeup to Cooling Towers. A part of PTA-ETP treated effluent re-used as a makeup to Cooling Towers. The balance is used for irrigation in our Greenbelts.
9.	Green belt of adequate width and density should be provided to mitigate the effects of fugitive emissions all around the plant. The bio-sludge from the ETP should be used as manure in the green belt development. Company shall develop greenbelt in consultation with DFO as per CPCB guidelines.	Greenbelts with adequate width & density were already provided. These greenbelts were developed in consultation with the District Forest Deptt. Bio-sludge from ETP is being used as a manure after converting it to semi solid form.
10.	The IOCL shall make efforts to sell petroleum coke (0.9 MMTPA) to organized industries having consent from the concerned State Pollution Control Board. Further, the Pet-coke from the Delayed Coker Unit should be conveyed to storage area by pipe conveyer system. The company should ensure to prevent seepage in Pet-coke stockpile / storage area to prevent soil and ground water pollution.	The Refinery gives Pet-coke to a separate IOCL division called Marketing Division which sells the same to various agencies. For Fy-16-17 total pet coke supply is 890989.45 MT. Pet-coke is conveyed to storage area by pipe conveyer system.
11.	The oily sludge generated from the refinery operation should be subjected to melting pit treatment for recovery of oil. The recovered oil should be recycled. The residual oily sludge should be disposed off in the HDPE lined pits.	The raw oily sludge generated from the Refinery is subjected to Melting Pit treatment for recovery of oil. The recovered oil is recycled back with crude oil for processing. - The residual sludge is disposed off through Bio-remediation. - Part of the sludge is processed in Coker unit. - There are 4 nos. lined pits available for storing residual oily sludge.
12.	The company should adopt mounded storage for LPG. The project authorities shall also comply with all the environmental protection measures and safeguards recommended in the EIA/EMP and risk analysis report.	The Mounded Bullets are in operation.
13.	Occupational Health Surveillance of the workers should done on a regular basis and records maintained as per the Factories Act.	The Refinery has a full-fledged Occupational Health Centre (OHC) in operation. The OHC carries out health surveillance of the workers on a regular basis and records are maintained.
General conditions		
1.	The project authorities must strictly adhere to the stipulations made by the Haryana State Pollution Control Board and the State Government.	Complied
2.	No further expansion or modernization in the plant should be carried out without prior approval of the Ministry of Environment & Forests.	Noted. Being taken care-off.

Specific conditions:

Sl. No.	EC Conditions	Compliance Status
3.	At no time, the emissions should go beyond the prescribed standards. In the event of failure of any pollution control system adopted by the units, the respective unit should be immediately put out of operation and should not be restarted until the desired efficiency has been achieved.	The stack SO2 emission level of the Refinery remains slightly more than 1000 kg/hr.
4.	The overall noise levels in and around plant area should be kept well within the standards (85 dBA) by providing noise control measures including acoustic hoods, silencers, enclosures etc. on all sources of noise generation. The ambient noise levels should conform to the standards prescribed under EPA Rules, 1989 viz 75 dBA (day time) and 70 dBA (night time).	The Refinery has provided silencers or compressor discharge, acoustic leggings on turbo generators & ejectors and acoustic chambers a the burners. The ambient noise level meets the standards.
5.	The project authorities must strictly comply with the provisions made in Manufacture, Storage and Import of Hazardous Chemicals Rules, 1989 as amended in 2000 for handling of hazardous chemicals etc. Necessary approvals from Chief Controller of Explosives must be obtained before commission of the project.	Necessary approvals from PESO were obtained before commissioning.
6.	The project authorities must strictly comply with the rules and regulations with regard to handling and disposal of hazardous wastes in accordance with the Hazardous Waste (Management & Handling) Rules, 2003. Authorization from the State Pollution Control Board must be obtained for collections / treatment / storage / disposal of hazardous waste.	Complied. Consents (Under Air, Water act) and Authorization for Hazardous Wastes from HSPCB has been obtained which is valid up to 30.09.2021.
7.	The project authorities will provide adequate funds both recurring and non-recurring to implement the conditions stipulated by the Ministry of Environment and Forests as well as the State Government along with the implementation schedule for all the conditions stipulated herein. The funds so provided should not be diverted for any other purposes.	Complied
8.	The stipulated conditions will be monitored by the Regional of this Ministry at Chandigarh / Central Pollution Control Board. A six monthly compliance report and the monitored data should be submitted to them regularly.	A six monthly compliance report on EC - conditions is regularly sent.
9.	The Project Proponent should inform the public that the project has been accorded environmental clearance by the Ministry and copies of the clearance letter are available with the State Pollution Control Board / Committee and may also be seen at Website of the Ministry of Environment and Forests at http://www/envfor.nic.in This should be advertised	Was complied.

Specific conditions:

Sl. No.	EC Conditions	Compliance Status
	within seven days from the date of issue of the clearance letter at least in two local newspapers that are widely circulated in the region of which one shall be in the vernacular language of the locality concerned and a copy of the same should be forwarded to the Regional Office.	
10.	The project authorities should inform the Regional Office as well as the Ministry, the date of financial closure and final approval of the project by the concerned authorities and the date of commencing the land development work.	Was complied